DOCUMENT RESUME

ED 027 647 EC 001 211

Educable Mentally Retarded: Guide for Curriculum Development.
North Carolina State Dept. of Public Instruction, Raleigh.
Report No-P-401
Pub Date Apr 67
Note-54p.
EDRS Price MF-$0.25 HC-$2.80
Descriptors-Communication Skills, *Curriculum, Curriculum Development, Educable Mentally Handicapped, Elementary Grades, *Exceptional Child Education, Interpersonal Competence, Junior High Schools, *Mentally Handicapped, Number Concepts, Primary Grades, Program Content, *Program Planning, Senior High Schools, *State Programs, Student Characteristics, Teaching Methods, Units of Study (Subject Fields)
Identifiers-North Carolina

Designed to aid in developing instructional programs in North Carolina, the guide defines the educable mentally retarded (EMR) and presents the goal of the EMR education program. Also outlined are principles and methods of instruction, traditional areas of the curriculum as they relate to the EMR, and development of a sequential curriculum. Basic learnings in social competencies, communication skills, and number concepts are listed at each of four levels: primary, elementary, junior high, and senior high. A bibliography cites 13 general references and 20 publications in the areas of curriculum, speech and language development, physical activities, periodicals, and curriculum guides. Appendixes provide information on field trips, daily class schedule, grading, reporting to parents, and approximating mental age from IQ and chronological age. (DF)

ED 027647

MAY 9 1967

GUIDE FOR
CURRICULUM DEVELOPMENT
NORTH CAROLINA PUBLIC SCHOOLS

EDUCABLE MENTALLY RETARDED

EDUCABLE MENTALLY RETARDED

Guide For Curriculum Development

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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STATE DEPARTMENT OF PUBLIC INSTRUCTION
RALEIGH, NORTH CAROLINA
Publication 401

FOREWORD

This publication has been written in order to serve as a guide to school personnel in county and city public school administrative units in North Carolina for developing curricula to meet the special needs of one category of handicapped children: the educable mentally retarded. Special curricula are devised to insure that such education be appropriate education. This State has a long-standing commitment to the principle that a minimum twelve-year program of public education should be available to every child regardless of variance in abilities or of any handicapping conditions.

As with all curricula, the curriculum for the educable mentally retarded is not static. It changes and develops in response to new knowledge and to the needs and requirements of those being served. For this reason this guide is correctly viewed as but one revision in what, of necessity, must be a sequence of revisions, each reflecting the changes in a relatively new and dynamic area of education.

Acknowledgment is made to all those members of the staff of the Department of Public Instruction who assisted in preparing this guide, and especially to Felix S. Barker, Director of the Special Education Section, and members of his staff, including Voris G. Bailey, James L. Barden, Mrs. Doris P. Francis, Mable L. Hardison, Gordon Reece Howell, Gerald C. Hudson, David L. Lillie, Frederic M. McCutchen, Paul A. Peeples, James E. Price, Mrs. Pearle R. Ramos, and Addison Neal Smith, and also to Eugene Burnette and Walter R. Jacobs of the Exceptionally Talented Section. Special acknowledgment is made to the following members of the staff of the Department: James E. Jackman for final editing and layout; Mrs. Pat Bowers for designing the cover; Mrs. June W. Lowery for typing many versions of the manuscript; and Thomas B. Maynard and Lonnie Elton Tant for the reproduction of working copies.

Valuable contributions to this publication were made by the following persons through their participation in workshops and other activities: C. Milton Blue, Appalachian State Teachers College, Boone; Eleanor E. Boyd, Guilford County Public Schools, Greensboro; Mrs. Mary Jo Burnette, Raleigh; Mrs. Bettye Carpenter, Gardner-Webb Junior College, Boiling Springs; C. Douglas Carter, Winston-Salem/Forsyth County Public Schools; Allen R. Cohen, Vocational Rehabilitation Regional Office, Charlottesville, Virginia; Walter Fitzgibbon, Western Carolina College, Cullowhee; Sarah J. Hall, Rowan County Public Schools, Salisbury; Hardwick W. Harshman, Rhode Island State College, Providence, Rhode Island; H. Jay Hickes, Charlotte/Mecklenburg Public Schools; David J. Irvine, Greensboro College, Greensboro; Mrs. Octavia B. Knight, North Carolina College, Durham; John W. Magill, North Carolina State University, Fort Bragg Branch, Fayetteville; Max Padgett, Rutherford County Public Schools, Rutherfordton; T. O. Page, New Hanover County Public Schools, Wilmington; Robert A. Pittillo, Raleigh Public Schools, Raleigh; Gilbert G. Ragland, East Carolina College, Greenville; Joseph R. Ramsey, Asheville and Buncombe County Public Schools, Asheville; Frank Saunders, Greensboro Public Schools, Greensboro; Wayne Sengstock, National Association for Retarded Children, New York, New York; and Willard S. Swiers, Chapel Hill Public Schools, Chapel Hill.

Chas. T. Carroll

State Superintendent of
Public Instruction

April, 1967

PREFACE

There is a definite pattern in the development of curricular and instructional guides. At the top level is the determination of a State program of studies. By law this responsibility rests with the State agency. The next step in the process is that of developing a curriculum guide. This is an elaboration upon a particular segment or portion of the program of studies and is done under the leadership of the professional staff of the State Department of Public Instruction. The third and final step is that taken at the local administrative unit level by way of developing a usable, viable teaching guide.

This "Guide for Curriculum Development" is not in itself a curriculum guide in the usual sense. It certainly is not intended as a course of study. More precisely it is designed to serve as a resource or a general guide to administrators, supervisors, and teachers in the public schools of North Carolina in developing instructional programs for the educable mentally retarded. The need to "tailor" programs to meet the unique needs of the many different groups of pupils makes necessary this type of publication. The use of this guide does not preclude the use of other guides and resources. In fact the traditional curriculum guides will complement this publication and together they will constitute a valuable resource for planning and teaching.

The table of contents will provide the reader with a knowledge of the arrangement of the material in this publication. Some published works which were helpful in compiling this guide, and which will be of value in developing curricula for the educable mentally retarded, are listed in the bibliography.

NILE F. HUNT
Director, Division of Instructional Services

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A curriculum seeks to answer the question of what should be taught to the retarded, as well as why and when it should be taught. It does not provide the details of how this content should be taught; for example, a curriculum may suggest that the concepts of a penny, nickel, and dime be taught to children with a certain mental age, or that children in the primary special class learn about the different members of the family. It does not describe the means by which different teachers teach these concepts. The methods used would be limited to the interests and needs of the children in a particular situation; whereas the basic content would be pertinent in all situations.

—**Robert L. Erdman, Educable Retarded Children in the Elementary Schools, Washington, D. C.: Council for Exceptional Children, NEA, 1961, p. 29.**

The teacher of the special class should be given considerable latitude in organizing the curriculum according to the needs and abilities of the children. Special classes do not ordinarily follow a standard curriculum because of the diverse nature and characteristics of the children involved. It is necessary for the teacher, as the trained specialist, to have freedom to organize the class according to the abilities and needs of the particular children assigned to her. This of course does not mean that she lacks a program, but rather that she is flexible enough to suit the curriculum to the children.

—**Samuel A. Kirk, Educating Exceptional Children, Boston: Houghton Mifflin Co., 1962, pp. 118-9.**

WHO ARE THE EDUCABLE MENTALLY RETARDED?

DEFINITION OF MENTAL RETARDATION

Mental retardation, as defined by the American Association on Mental Deficiency, refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in one or more of the following aspects of adaptive behavior: (1) maturation, (2) learning, and (3) social adjustment.[1]

Rate of **maturation** refers to the rate of sequential development of self-help skills of infancy and early childhood, such as sitting, crawling, standing, walking, talking, habit training, and interaction with age peers.

Learning ability refers to the facility with which knowledge is acquired as a function of experience. Learning difficulties are usually most manifest in the academic situation; if mild in degree, they may not even become apparent until the child enters school. Impaired learning ability is, therefore, particularly important as a qualifying condition of mental retardation during the school years.

Social adjustment during pre-school and school-age years is reflected in the level and manner in which the child relates to parents, other adults, and age peers. Social adjustment at the adult level is assessed in terms of the degree to which the individual is able to maintain himself independently in the community and in gainful employment, as well as his ability to meet and conform to other personal and social responsibilities and standards set by the community.

DEFINITION AND CHARACTERISTICS OF THE EDUCABLE MENTALLY RETARDED

Intellectual and Academic Characteristics

- **The classification of educable mentally retarded applies to those children of school age who are developing intellectually at about one-half to three-fourths the rate of average children.**
- **They are usually defined as having intelligence quotients within the range from about 50 to about 75 as determined by individual intelligence tests. (This specific IQ range, however, is not necessarily used in rules and regulations governing eligibility for placement in special classes.)**
- **It is estimated that approximately 3 percent of the school enrollment will be found in this category.**

[1] Rick Heber, "A Manual on Terminology and Classification in Mental Retardation," *Monograph Supplement to American Journal of Mental Deficiency*, Second Edition, 1961, pp. 3-4.

- They are retarded to the extent that they are not able to make satisfactory progress in the regular school program.

  Their readiness for academic school work is definitely delayed. As an illustration, a child with an IQ of 60 might not be ready to learn to read or to understand simple arithmetic (that is, attain a mental age of six or six and a half) until he is 10 or 11 years of age, the average fifth or sixth grade age.

  The academic handicaps may result in great frustration, feelings of inferiority, undesirable behavior, and other adverse personality characteristics more serious than the intellectual retardation itself.

- As adults they may be expected to attain a mental age of 8 to 11 or 12 years or an achievement of from third to sixth grade level.

- As a group they are limited in capacity for sustained self-direction at other than simple levels of operation.

Social Characteristics

- A large percentage of retarded children come from low socio-economic areas and live in homes which are generally inferior in health conditions. Social values and attitudes generally correspond to those of the home and neighborhood and are usually typical of the substandard environment in which many of these children live.[2]

- In unfamiliar social situations, they are limited in making adequate social judgments by their inability to evaluate.

- They tend to be highly suggestible and somewhat lacking in the usual inhibitions.

Physical Characteristics

- Most authorities agree that the educable mentally retarded are more nearly like children of average and above-average intellect in physical and motor characteristics than in any other traits. Any differences in height, weight, and motor skills have usually been mentioned in connection with the cause of the retardation. For example, those whose retardation is organic in origin, such as the brain injured, may be somewhat more handicapped in motor skills; those whose retardation is thought to be of cultural-familial origin may be slightly lighter in weight and shorter in stature, but if socioeconomic levels are controlled, this might not occur.[3,4]

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[2] Samuel A. Kirk, *Educating Exceptional Children*, Boston: Houghton Mifflin Co., 1962, p. 110.
[3] Lloyd M. Dunn, "Educable Mentally Retarded Children," *Exceptional Children in the Schools*, ed., Lloyd M. Dunn, New York: Holt, Rinehart and Winston, Inc., 1963, p. 88.
[4] Kirk, *op. cit.*, p. 109.

Occupational Characteristics

- Research has indicated that approximately 80 percent of those classified as educable mentally retarded become self-supporting at the adult level, usually in unskilled or semiskilled jobs.[5]

- Success of the educable mentally retarded in any occupation depends upon their knowledge of their physical, cultural, and social environment.

- Acceptance by fellow workers is the largest single problem in the job adjustment of the retarded.[6]

- Other possible sources of difficulty are the inability to keep to a schedule, dress appropriately, and maintain acceptable general conduct.

Future Environment

- They are likely to be working at a service, agricultural, unskilled, or semiskilled occupation.

- They will probably marry and have children.

- They may eventually become homeowners.

- More than likely they will remain in the home community.

- Although they have been classified as mentally retarded throughout their school lives, they probably will cease to have this identification after the end of schooling, especially in urban areas.

[5] Dunn, *op. cit.*, p. 88.
[6] Ralf A. Peckham, "Problems of Job Adjustment of the Mentally Retarded," *American Jounal of Mental Deficiency*, 56 (October 1951), p. 452.

GOAL OF THE EDUCATIONAL PROGRAM

The ultimate goal of the total educational program for the educable mentally retarded (whether carried out by the home, the public school, the institution, or community agencies) is "socialization—the development of personality in relation to environment so that within the limits of his ability the individual may become a social asset instead of a social liability." [7] In a broad sense, this goal does not differ from the goal of education for all children. The goals of education in general—self-realization, effective human relationships, economic efficiency, and civic responsibility[8]—also serve as goals for the educable mentally retarded. But the education of the educable mentally retarded differs from the education of average children in the reduction in emphasis placed upon academic achievement in the traditional sense and the additional emphasis placed upon the development of personality and adequacy in occupational and social areas.

It is often difficult, even for persons in the normal range of ability, to master the skills and acquire other attributes necessary to make an adequate post-school adjustment. Dunn states emphatically: "Studying people in other lands, foreign language, more complex mathematics of even the upper elementary grades, and other academic skills so essential for students going on to college are beyond the interests, capabilities, and needs of the retarded." [9] For the retarded it is apparent that learning which will have no utility is a luxury which cannot be afforded. *A "watered-down" regular curriculum is inappropriate for the retarded. A different curriculum is needed.* It is primarily for this reason that special classes are organized.

The educable mentally retarded pupils should have at least twelve years in a public school program, and frequently considerably more will be required. Even in the best of school programs, however, retarded pupils will be limited as to the amount and kind of learning they can acquire. Only those academic skills which will be needed by the retarded to become independent members of society should be emphasized. An academic skill is applied and reapplied to problems and situations found in the environment both during the acquisition of this skill and after it becomes a secure part of the skill repertoire. For example, the skill of reading will be a functional pursuit for the retarded and used less as a leisure time activity. It will be a skill needed in filling out applications for employment; in fulfilling job duties; in looking up telephone numbers; and in reading such things as advertisements, highway signs, and labels and instructions on food packages. It is not an end in itself, therefore, but rather a means for attaining the ultimate goal of socialization.

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[7] Stanley Powell Davies, *The Mentally Retarded in Society*, New York: Columbia University Press, 1959, p. 215.
[8] *Policies for Education in American Democracy*, Educational Policies Commission, Washington, D. C.: National Education Association, 1946, p. 47.
[9] Dunn, *op. cit.*, p. 88

PRINCIPLES and METHODS OF INSTRUCTION

Successful instruction is based upon the *readiness* of pupils and upon their *motivation* to learn. This is true for pupils of all abilities. Some of the basic principles of instruction used in the successful teaching of the mentally retarded, however, differ in some essential ways from those used in teaching children of greater mental ability.

BASIC PRINCIPLES OF INSTRUCTION

The basic principles of instruction of the educable mentally retarded, insofar as they differ from those used with children of greater ability, have been summarized well by two authorities on the education of exceptional children. G. Orville Johnson has written that in teaching the retarded particular attention and planning are required to insure that the instruction:

> **(1) is highly organized and sequential with no gaps that the child must fill in independently,**
>
> **(2) is slower in rate than for normal children,**
>
> **(3) is presented in a greater variety of ways and situations, and**
>
> **(4) provides for greater application of skills learned.**[10]

Similarly, Samuel A. Kirk has written:

> **The primary characteristic of mentally retarded children is that they do not learn as readily as others of the same chronological age by methods ordinarily used. Instruction therefore must utilize the best practices in learning, as follows:**
>
> **(1) Progress is from the known to the unknown, using concrete materials to foster understanding of more abstract facts.**
>
> **(2) The child is helped to transfer known abilities from one situation to another, rather than being expected to make generalizations spontaneously.**
>
> **(3) The teacher uses many repetitions in a variety of experiences.**
>
> **(4) Learning is stimulated through exciting situations.**
>
> **(5) Inhibitions are avoided by presenting one idea at a time and presenting learning situations by sequential steps.**
>
> **(6) Learning is reinforced through using a variety of sense modalities—visual, vocal, auditory, kinesthetic.** [11]

[10] G. Orville Johnson, "The Education of Mentally Handicapped Children," *Education of Exceptional Children and Youth*, eds. William M. Cruickshank and G. Orville Johnson, Englewood Cliffs, N. J.: Prentice-Hall, 1958, p. 225.
[11] Kirk, *op. cit.*, p. 121.

Directed Learning Tasks

Many of the basic principles of instruction cited above can be applied in the special classroom through the use of what may be termed "directed learning tasks." [12] These kinds of tasks are ones which are specifically designed by the teacher to take into account the special learning characteristics of the mentally retarded. Each directed learning task is planned to reach a specific short-term objective—the learning of a particular skill, fact, or behavior. In designing directed learning tasks, the following points should be kept in mind:

- **The directed learning task should be simple.**

  The new task should contain the fewest possible elements. Most of the elements in the task should already be familiar to the pupil so that he has very few "unknowns" to learn.

- **The directed learning task should be brief.**

  The length of time required to complete a new task should be short. The new task is added as the latest of a sequence of tasks already learned, and the time consumed in performing the sequence may increase in length as new tasks are added.
  The mentally retarded child has frequently been described as having a short attention span. When relatively complex, unfamiliar tasks are presented to the retarded child, he will seem to be unable to concentrate. However, when new tasks that are brief in duration are added in sequence to tasks that already have been learned, the attention span of the retarded child does not differ essentially from that of the normal child.

- **The directed learning task needs to be presented in a step-by-step manner.**

  There should be a planned sequence with small steps, each step building on the previous one. It is also important that the steps be as nearly equated for level of difficulty as can be arranged.

- **The directed learning task should be the kind of task with which success is possible.**

  Initially, the teacher will have to help the educable mentally retarded child overcome the "expectancy to fail" which is usually characteristic of him, especially if he has spent more than one or two years in a regular class. It is also imperative that the retarded child learn to accept and handle failure in an acceptable manner. The child will not succeed at every task on the first trial, but the task should be well within his capability. Especially in the beginning, the teacher should provide for some

[12] We are indebted to Dr. Eugene Burnette of the State Department of Public Instruction for the concept and development of these directed learning tasks as a method of teaching retarded children.

sort of reinforcement—that is, should let the child know he has performed correctly and well when a task is successfully completed. The reinforcement will often take the form of verbal comment from the teacher, but many other manifestations of approval should be utilized as well. Immediate reinforcement for every attempt made is not necessary, but it should be fairly frequent until the learner can experience success on his own.

- **The directed learning task needs to be repeated successfully by the pupil at intervals until the teacher is reasonably sure the pupil has mastered the task and can perform it without help.**

  As an illustration of the importance of successful repetition, as well as of the sequential order of tasks, let us consider, for example, the skills involved in sewing a garment. The preferable procedure would be to insure that the pupil first learn to place a pattern on a piece of cloth. This task should be repeated until it can be performed independently and successfully before moving to the next step of learning to cut the cloth. The result will be the ability to perform independently a sequence of tasks leading to the completion of a garment.

- **The directed learning task should be applied to objects, problems, and situations found in the pupil's environment.**

  The rote learning or "memorization of facts" method of teaching is an inappropriate approach to instruction for the retarded. It is true that studies have shown that the retarded are comparable to children of normal intelligence in the ability to do some types of rote memory tasks. However, a characteristic of the retarded child is that he cannot utilize memorized facts and relate them to the other knowledge that he has. Therefore, the teacher must teach facts or skills as well as their application to objects and situations in the pupil's environment. This is another way of saying that the nature of the instruction should be "concrete" rather than "abstract."

The Unit of Experience

A principle underlying the learning processes of educable mentally retarded pupils is that social learnings must precede the acquisition of academic skills and then be integrated with them. These social learnings can be attained by means of instruction which utilizes immediate social situations. Unless the child has an understanding of his social environment, his other learnings will be little more than memorized facts which have no real meaning or significance.

The unit of experience provides opportunities for social learnings and for the application of basic skills in practical situations. It unifies around a central theme resources from many subject areas as well as from the pupils' experiences, and it provides knowledge, skill, or practice derived from the direct observation of or participation in activities or events. For the retarded, the unit of experience should be as closely related as possible to the realities of life.

In a special class for the educable mentally retarded, many of the activities will center around the current unit. Although it is necessary to have some time set aside for the development of reading and number skills, most of the other learning experiences—including the practical application of the reading and number skills—can be provided in well-chosen units of experience.

The choice of units is left to the discretion of the teacher, but the choice should be based upon the interests as well as the needs of the pupils. The teacher should not take a unit ready-made or developed by someone else and attempt to use it with his own pupils, certainly not without adapting it to his own class. The development of the unit should be a cooperative one, involving both pupils and teacher in the planning, execution, and continuing evaluation of the unit. It should have breadth and flexibility to provide for the large range of individual differences often found in special classes. All the pupils will not necessarily participate in the same activities within the unit.

Incidental Instruction

Valuable opportunities for children to learn or practice a language, arithmetic, or social skill may occur at any time—during a physical education activity, while eating lunch, while waiting for the school bus. These opportunities to support or reinforce a skill can be as valuable in promoting effective learning as can planned or unit activities. At such times the child is often strongly motivated to learn because of the interest or reality of the situation. The values of such incidental instruction should be appreciated, although the instruction of the retarded child must not be left entirely to so unstructured and random a method.

Incidental instruction should not be confused with incidental learning, however. Incidental learning—learning about things without attention being called to them—may occur in the retarded child just as in the child of greater ability, and the retarded child may learn some obvious facts in this manner. The subtleties probably will be overlooked, however, or they may be learned inaccurately or as fragments without any meaningful relationship to anything already known.[13] The teacher should be alert to these aspects of incidental learning and provide specific instruction when necessary.

MENTAL AGE AS IT RELATES TO READINESS

Successful teaching of the basic skills must be based on the readiness of the pupils. Children are expected to be ready to learn the basic skill subjects of reading and arithmetic when they have attained a mental age or six or six-and-a-half. An average child, with an IQ of 100, will attain a mental age of six when he is six years old. A child with an IQ of 75, on the other hand, will not attain a mental age of six until he is eight years old, and a child with an IQ of 50 will not attain a mental age of six until he is twelve. This relationship of readiness to mental age must be kept in mind in beginning the teaching of the basic skills to the retarded. A table for use in finding the approximate mental age when the IQ and chronological age are known is given as an appendix to this guide.

[13] Herbert Goldstein and Corinne Kass, "Incidental Learning of Educable Mentally Retarded and Gifted Children." *American Journal of Mental Deficiency* 66 (September 1961), p. 248.

TRADITIONAL CURRICULUM AREAS AS THEY RELATE TO THE E.M.R.

Because many of the present special class teachers of the educable mentally retarded recently taught in regular classrooms, a discussion of the traditional curriculum areas as they relate to the retarded is offered below. This discussion is presented also in recognition of the fact that administrators and instructional personnel in general education will be associated with the development of the curriculum for the educable mentally retarded. The discussion is necessarily brief. For more detailed presentations the reader is referred to sources such as those listed in the bibliography.

In general, the emphasis in teaching the retarded should be on the use—the practical value—of the subject matter and not on an abstract "knowledge about" the material. This should not be interpreted to mean that the retarded must not learn processes or should not learn by rote, but rather that one must be careful to assure that the processes and rote learnings can be used advantageously in practical everyday living. This emphasis on the practical value of the learnings largely determines what should be included in the curriculum. For example, it is inappropriate to teach the retarded the process of finding the square root of a number; even though a few of them could learn this process after much effort, it would have little meaning or use and the time could be spent more appropriately on other things. An encyclopedic knowledge of history or science is likewise an inappropriate aim. The curriculum, therefore, should be determined not only by what retarded children can learn but also by what will be of most value to them.

In a special class, it is not necessary to have separate periods for all of the traditional subject matter areas. Much of the instruction can be effected by means of experience units, with separate periods for specific instruction in the basic skills. The experience unit, in addition to providing a setting for the practice of basic skills and for the learning of subject matter, provides a setting for the development of good work habits and socially acceptable behavior patterns. Such personal and social development is as important in a curriculum for the retarded as are the academic learnings.

Language Arts

The language arts include all those skills needed in oral and written communication: listening, speaking, reading, writing, and spelling.

Listening and **speaking** skills must be developed before the teaching of reading can begin. No child will be able to read and comprehend a new word—even though he may be able to sound it out phonetically—unless it is first a meaningful part of his vocabulary. Because educable mentally retarded children often come from unstimulating cultural environments, their ability to use and to understand language is likely to be limited. The development of listening and speaking skills is therefore of basic and continuing impor-

tance in teaching the language arts to the retarded; it should be emphasized in all aspects of the school program and continued throughout the school years.

Listening and speaking skills can be taught through such activities as listening to stories, talking about interests and experiences, asking and answering questions, participating in games, listening to music and to various sounds and learning to discriminate among them, following directions, engaging in conversation, discussing trips taken, and making reports. Such activities should be used throughout the school years to develop vocabulary, to teach correct pronunciation and good enunciation, and to provide opportunities for the pupils to express thoughts in complete sentences. If a speech defect or a hearing difficulty is noted in a pupil, the speech therapist or school nurse should be consulted.

Reading readiness depends not only on the development of listening and speaking skills but on the development of visual memory and discrimination, an understanding of sequence, and left to right orientation. It should not be assumed that the retarded will pick up these skills automatically, and much repetition usually will be required in the learning process. The teacher should teach the pupils to observe and discriminate among pictures, colors, various shapes and sizes, words, letters, and numbers, and should give the pupils practice in matching these (to learn to notice small differences) and in putting such things as picture stories in the correct order. At the beginning of the acquaintance of the pupils with the written word, the experience chart is useful in helping them to see that the written symbol represents the spoken word. Experience chart stories should be developed from the children's verbalization about themselves and their environments. The effective use of the experience chart will virtually eliminate any problem of motivating the pupils to read. Any child, and especially the retarded child, will respond more readily and eagerly to reading materials that center on experiences familiar to him. Such teacher-pupil prepared materials are indispensable in a beginning reading program for the retarded even though commercial materials designed specifically for teaching reading to the retarded are beginning to appear on the market.

After a sight vocabulary has been established, the teaching of phonics (or "word-sounding") may begin, starting with simple words of one syllable.[14] Proficiency in phonics is not an end in itself. Practice in simple phonics will help the child sound out familiar words in new contexts. When he can do so with comprehension, he may be said to be reading. Later he may be able also to sound out some words he has never before encountered in printed form. The reading levels which e.m.r. persons will attain at maturity will range up to above a sixth grade level, but often will be much lower than this.

The reading materials needed by educable mentally retarded children will differ from those used by children of average ability for the following reasons:

- **The interest level of these materials will need to be substantially higher than the reading level because the interests of the retarded develop faster than their abilities.**

- **A great variety of reading materials at any one reading level is usually needed by the retarded because of their slow rate of progress from one reading level to the next.**

- **The educable mentally retarded often reject the regular basal textbooks because the interest level of the subject matter is too low, because they are ashamed to use books which are**

[14] For a discussion of the teaching of phonics and of reading, in general, to the retarded, the reader is referred to Samuel A. Kirk, *Teaching Reading to Slow-Learning Children*, Cambridge, Massachusetts: Houghton Mifflin Co., 1940.

normally used by younger children, or because they have had the books before in a regular classroom.

Writing should be taught to the retarded after they begin to learn to read and after they develop motor coordination through pre-writing activities such as coloring and drawing. Manuscript writing should be taught to the retarded because there is a greater correlation between it and printed words.[15] Many of the educable mentally retarded will be able to change over later to cursive writing, and all of them probably will want—and should be encouraged—to learn to write at least their own names in this form. In later life retarded persons will find it helpful to be able to read the cursive writing of others. The best way for them to acquire this ability is to learn to write cursively themselves, if possible.

It should be kept in mind that the legibility and accuracy of the writing are more important than the speed. The writing which retarded adults commonly will be called upon to do will include the filling out of application and other blank forms, including checks, and the writing of business and friendly letters.

Spelling should be introduced after the retarded are ready to read and write, and should include those functional words which they can read, understand, and (barring speech defects) pronounce correctly. It should be integrated closely with reading and writing rather than taught as a separate subject. The learning of lists of words unrelated to use has little value, and the learning and application of spelling rules should be minimized.

Retarded pupils should learn how to spell words they ordinarily will be called upon to write. These will include their names and addresses, basic words, and, later, occupational words. The teacher should anticipate the need for special words which may be used in unit and other activities in the school program. Basic vocabulary lists are used best as check lists rather than as formal spelling lists.

Arithmetic

Arithmetic for the educable mentally retarded should emphasize both number facts and the application of numbers to material objects. The teaching of number facts without their application to material objects will result in rote learning of abstract arithmetic processes but in little true understanding of numbers and their use. Another way of saying this is that there is a mathematical phase of arithmetic which deals with numbers and computational processes, and there is a social phase of arithmetic which deals with the application of the mathematical phase to situations which arise in everyday living. It is necessary to stress both phases.

Arithmetic readiness requires an understanding of the concepts represented by words denoting size relationships (small, large; short, long), amount (few, many), position (first, last; low, high), and comparisons (small, smaller, smallest); an ability to discriminate among various forms (circle, square); and the ability to count objects. Later, an understanding of vocabulary terms associated with numbers (such as inch, pound, pint, and dozen) will be needed. The arithmetic program should lead toward com-

[15] For some brain-injured children, it has been recommended that writing be taught entirely in cursive form because of its greater continuity. See Alfred A. Strauss and Laura E. Lehtinen, *Psychopathology and Education of the Brain-Injured Child*, Vol. I, New York: Grune & Stratton, 1947, p. 187.

petence in those things which retarded adults will need to know and use, such as the use of money, measurement, fundamental computational skills, and banking.

Social Studies, Science, and Health

Social studies (including history, government, and geography), science, and health should be integrated with language arts activities in units. An encyclopedic knowledge of these subjects is not the aim. What is taught should be related to the interests of the pupils and to their present and future needs. Audiovisual materials, especially films and filmstrips, are of great value in arousing the interests of pupils in social studies, science, and health.

History is an area which is difficult to delimit. The decision on how much and what to teach must be left largely with the teacher. Certainly the teaching of history should not consist of a tangle of facts and dates. Some of the basic historical events and persons of our national history should be taught, beginning with some knowledge of national holidays and the birthdays of patriots as they occur. Before they leave school, the retarded should have some understanding of our form of **government** (local, state, and national), particularly as it involves them through voting in elections. Important current events, both local and global, should be discussed in class. The pupils will have an interest in many current events from having experienced them first hand (e.g., a fire or accident in the neighborhood) or from having seen or heard of them via communications media. The daily newspaper is a valuable supplementary "text," particularly at the upper levels. In developing a social studies program through the school grades, an important consideration is that it be "spiral"—that is, it should start in the lower grades with the child and his immediate environmental interests and spiral outwards through the local community to the world community, the spiral repetitions through the grades becoming wider and more removed from the immediate.

Geography could be introduced by teaching the location of the classroom, lunchroom, principal's office, playground, and other school areas and their relation to each other. A model, diagram, or sand-table map of the school could be made. "North," "south," "east," and "west" should be identified in the classroom. The location of the school in relation to the surrounding neighborhood or to the pupils' homes could then be taught. This could be followed by a study of maps of the town or city, county, state, and nation, since the use of highway maps will be of practical value to the retarded as adults. Some familiarity with the world map and globe could be included in relation to current events and science, along with some knowledge of the world and its peoples. A detailed knowledge of world geography, however, is inappropriate to the future needs of the retarded.

In **science**, the basic goal should be to help the child understand his environment, relate himself to it, and become better adjusted in it. Everyday phenomena of the physical and biological world around him should be taught, including the nature and growth of plants and animals, the human body, the seasons, the weather, food, clothing, shelter, the earth, simple astronomy, machines, and some knowledge of electricity. Science activities should be correlated with language arts, current events, health, and other appropriate areas of learning.

Health instruction should include the basic principles of cleanliness; the care of teeth and hair; nutrition and proper diet, exercise, and rest; the wearing of suitable clothing (indoors and out); the possible harmful aspects of the use of alcohol, tobacco, and drugs;

sex education; and the need for various kinds of immunization and physical examinations (including examinations of teeth, vision, and hearing). It may be necessary to include in the school curriculum for the retarded some things which ordinarily would not be taught at school—e.g., shampooing, the laundering of clothes, and even bathing and showering. If possible, one should seek the cooperation of the parents, and where necessary, refer specific families to local health and social agencies.

Physical Education

Physical education should be an integral part of the school program for the educable mentally retarded. It should consist of more than mere random activities during a recess period and be of real physical, recreational, and social value. As part of the curriculum, physical education is closely related to health and to social development; indeed, it would not be exaggerating its importance to say that it is basic to everything in the curriculum.

Although the educable mentally retarded child is slow in developing motor coordination and may have some physical limitations, he is more like the average child physically than in any other way. The physical education program for him, therefore, can be much like that for other children. Indeed, as the retarded child grows older, his mental limitations may restrict his participation in a regular physical education program more than any physical limitations; this is particularly true in the more highly organized team sports.

Activities which will develop coordination, balance, strength, and endurance should be begun early, and physical fitness activities should be continued throughout the school years—in the classroom, in the gymnasium, and on the playground or athletic field. The special class teacher should seek the advice of the school physical education director in planning a program of calisthenics and group sports. Games for enjoyment and use of leisure time should not be neglected; some of them will be useful throughout the adult life of the retarded.

Art and Music

Art and music activities can contribute much to the social growth and personal enjoyment of the retarded. Participation, rather than an abstract knowledge about these subjects, should be stressed. The art and music teachers should be encouraged to work with retarded classes. At the secondary school grade levels, art and music classes and activities provide a means of integrating the retarded with other pupils.

Drawing, painting, modeling in clay, and other art and craft activities provide valuable means of expression and of contributing to a group effort. Singing, through the learning of patriotic songs and action or game songs, can promote the development of language arts and social studies. Dancing, rhythm bands, and other music-associated activities have great value in developing the social confidence of children. These activities also will contribute to an increased enjoyment and appreciation of beauty throughout life, to a positive use of leisure time, and to the development of hobbies.

Other Curriculum Areas

Home economics, industrial arts, vocational agriculture, driver training, and **typing** are some of the offerings at the secondary grade levels which can provide appropriate training for the retarded.

It is difficult to include retarded pupils in the regular class sections of home economics, industrial arts, and vocational agriculture because of their slower rate of learning and their greater need for individual instruction. If there are only a few retarded pupils to be enrolled in these subjects, they can sometimes be included in the regular sections, although the preferable procedure would be to form special sections. In either case, the special class teacher should serve as a consultant teacher to the regular teachers in helping to plan and carry out a program suited to both the interests and the needs of the retarded. In secondary schools having three or more special teachers these subjects could be taught by the special teachers as part of a departmentalized program, utilizing the regular classrooms and facilities if at all possible.

Enrollment of retarded pupils in driver training or typing should be on the same basis as that of other pupils. The special teacher should prepare the retarded pupils for these subjects (by taking up a study of the driver training or typing manual, for example) and should correlate the special class curriculum with these other subjects.

DEVELOPING A SEQUENTIAL CURRICULUM FOR THE E.M.R.

The chart on page 20 outlines a plan for developing a sequential curriculum for the educable mentally retarded. A sequence of four classes (Levels I through IV) can provide educable mentally retarded pupils with a minimum 12-year public school program in which the chronological age range of the pupils at any one class level is no greater than four years (with the possible exception of Level IV). When a school unit begins a program for the educable mentally retarded, it usually is not possible to establish classes at all four levels at the same time. The program as outlined is offered as a suggested pattern toward which a local school unit might strive in meeting the needs of its retarded pupils throughout the school years. The first special class started in a school is most often a Level II class; classes at Levels III and IV then are organized as the pupils in the original class grow older. A class at Level I is usually the last to be organized because of the difficulty in identifying retarded children at or before the regular first grade level and because, in the past, the limited supply of special teachers has necessitated their use at levels where the need is more acute.

Regardless of the overall pattern or of the number of classes, each class taught by a State-allotted special teacher should be organized in accordance with current State Board of Education rules and regulations governing such classes.

CURRICULUM GOALS

It has been stated that the ultimate goal of the total educational program for the educable mentally retarded is socialization—that is, the development of personality in relation to environment (see p. 4). Specifically, the public school curriculum should prepare the educable mentally retarded person for duties as prospective spouse, parent, householder, and citizen, and should give him vocational proficiency through the development of personal attributes and specific skills necessary for success on the job. The curriculum should be developed with these goals kept actively in mind.

CURRICULUM CONTENT

Curriculum content may be thought of as a **sequence** of subgoals leading toward the attainment of an ultimate goal; these subgoals must be of sufficient variety and number (that is, of sufficient **scope**) to embrace all those learnings thought to be necessary for the attainment of the ultimate goal.

Basic Learnings

Many of the subgoals for the educable mentally retarded constitute basic learnings in three major curriculum areas: (1) social competencies, (2) communication skills, and (3) number concepts.

Social competencies include learnings of both general and specific social value, including such learnings as they relate to the home, the family, the school, the community (from local to state), citizenship, health (including mental health), safety, cultural heritage, current events, and vocational exploration. The social competencies are listed first among the basic learnings because they provide the foundation and setting in which other learnings and skills are developed. They are called "social competencies" rather than "social studies" to emphasize the importance of "competency in" such learnings rather than "study about" them.

The **communication skills** are those of listening, speaking, reading, writing, and spelling. They are called "communication skills" rather than "language arts" to emphasize the importance of developing the practical skills of basic communication rather than of developing the "arts" associated with language or literature.

Number concepts include the use of numbers, practical arithmetic, and related learnings such as the ability to use numbers in measuring, in telling time, and in dealing with money matters.

A more detailed listing of basic learnings for the educable mentally retarded is given in the next chapter of this guide.

Correlated Learnings

In addition to the basic learnings and correlated with them, the curriculum for the educable mentally retarded should include (at the levels indicated on the chart) learnings in the areas of art, music, physical education, practical science, homemaking and/or vocational training, and driver training, and in areas which are optional such as band, chorus, sports, and typing. Information on what the curriculum should include in these other areas is given in the preceding chapter of this guide.

CURRICULUM AND ORGANIZATION AT EACH LEVEL

Level I (Primary)

A Level I (Primary) special class includes educable mentally retarded pupils having chronological ages of 6, 7, 8, and possibly 9; mental ages ranging from about 3 to about 6; and reading levels ranging up to about grade 1.

Level I is a pre-readiness level in which the emphasis is on the training of sensory perception (including auditory, visual, and kinesthetic discrimination and association) as it relates to all areas of learning, and on the development of social competencies. The curriculum at Level I should include the following aspects of the basic learnings:

Social Competencies: An understanding of the self as it relates to the home, the family, and the school; the basic aspects of health and safety; and an introduction to cultural heritage and current events. The curriculum at this level should emphasize the development of independent work habits (the ability to work without constant supervision, to finish tasks started, and to follow verbal instruction without further urging), group experiences of play and sharing (including respect for the rights of others, self-control, and behavior appropriate in groups), self-care training as needed, and the familiarization of the child with the physical, cultural, and social features of his home and school environments.

Communication Skills: Language development (the development of listening and speaking skills, including the development of auditory discrimination, memory, and association); the development of pre-reading skills (visual discrimination and memory); and the development of pre-writing skills (visual-motor coordination). The program at this level should emphasize all the skills needed in informal social discourse (including the development of vocabulary) and in attaining readiness for reading and writing. Most Level I pupils should be ready to read by the time they move to a Level II class, but those pupils at the lower end of the educable mentally retarded IQ range may not be ready to read (that is, may not have attained a mental age of 6 or 6½) until they are chronologically much older than most Level I pupils; consequently, they may have to continue their reading readiness program in a Level II class.

Number Concepts: The development of pre-arithmetic skills (including the understanding and use of numbers as applied to objects) and of the basic concepts of time, money, and measurement.

In addition the curriculum should include art, music, and physical education activities (see under these subjects in the preceding chapter) correlated with the basic learnings.

Organization: The special class at Level I should be organized on a self-contained basis as are other classes in an elementary school setting; the regular art, music, and physical education instructors should serve as teacher-consultants.

Level II (Elementary)

A Level II (Elementary) special class includes educable mentally retarded pupils having chronological ages of 9, 10, 11, and possibly 12; mental ages ranging from about 4½ to about 9; and reading levels ranging up to about grade 3.

Level II is the level at which instruction in the basic skills is begun, along with a broadening and strengthening of the social competencies. The curriculum at Level I should include the following aspects of the basic learnings:

Social Competencies: An understanding of the self as it relates to the home, the family, the school, and the community; health; safety; cultural heritage; and current events. The curriculum should build upon the social competencies developed at Level I.

Communication Skills: A continuing emphasis on the development of listening and

speaking skills; beginning instruction in reading, writing, and spelling, with pre-readiness activities continued as needed.

Number Concepts: Beginning arithmetic and related learnings involving money, time, and measurement. The pupil should be able during this level to use addition and subtraction in solving problems arising out of concrete situations in his environment. Some pupils may be able to learn simple fractions at this level.

In addition the curriculum should include art, music, physical education, and science activities (see under these subjects in the preceding chapter) coordinated with the basic learnings.

Organization: As at Level I, the Level II special class is self-contained; the regular art, music, and physical education instructors should serve as teacher-consultants.

Level III (Junior High)

A Level III (Junior High) special class includes educable mentally retarded pupils having chronological ages of 12, 13, 14, and possibly 15; mental ages ranging from about 6 to about 11; and reading levels ranging from about grade 1 to about grade 5.

At this level the curriculum should consolidate the social and academic learnings and should promote the application of the academic learnings to prevocational training and homemaking skills. The curriculum at Level III should include the following aspects of the basic learnings:

Social Competencies: An understanding of the self as it relates to the home, the family, the school, the community, and the state; health; safety; cultural heritage; current events; prevocational exploration; and basic vocational competencies.

Communication Skills: Listening, speaking, reading, writing, and spelling, with emphasis on continuing language development and the practical use of reading, writing, and spelling.

Number Concepts: Practical arithmetic (including the application of addition, subtraction, multiplication, and division, and of fractions up to eighths, to practical problems) and related learnings involving money, time, and measurement.

In addition the curriculum should include practical science (correlated with the basic learnings), homemaking skills and/or prevocational training, art, music, and physical education (see under these subjects in the preceding chapter).

Organization: At Level III a block program is the most desirable, with the special class teacher (or teachers) teaching the basic learnings and practical science, the special or regular teacher(s) teaching homemaking skills and prevocational training, and the regular teachers teaching art, music, and physical education. (See chart outline.) A modified block program may be necessary if there is only one special teacher at this level; in such a case the special class may have to be essentially self-contained except for those periods when pupils can take physical education, art, music, homemaking, or prevocational training from the regular teachers on what amounts to a departmentalized basis. If the class at this level is not located in a junior high school, Level II organization is suggested.

Level IV (Senior High)

A Level IV (Senior High) special class includes educable mentally retarded pupils having chronological ages of 15, 16, 17, and 18, or above; mental ages ranging from about 7½ to about 12; and reading levels ranging from about grade 2.5 to about grade 6.

At this level the emphasis should be on using the basic skills previously learned (while continuing to strengthen them) and on giving each pupil the social and vocational competence to make the transition to post-school living. The curriculum at Level IV should include the following aspects of the basic learnings:

Social Competencies: An understanding of the self as related to the economic and social environments; health; safety; cultural heritage; current events; and vocational competencies (correlated with on-the-job training).

Communication Skills: The development of maximum efficiency in listening, speaking, reading, writing, and spelling, with emphasis on the use of these skills in the economic and social environments.

Number Concepts: The application of practical arithmetic (up to and including simple interest) and related learnings to problems found in the economic and social environments.

In addition, the curriculum should include practical science, homemaking skills and/or vocational training, art, driver training, music, and physical education, and (for some pupils) band, chorus, organized sports, and typing. On-the-job training, either on or off campus, should be included in the last year (or the last two years) of the Level IV program.[16]

Organization: At Level IV, in a senior high school setting, block or departmentalized organizational plans are desirable. A block plan would be organized similar to that described for Level III.

In a large high school having three or more special teachers and an on-the-job training program, a departmentalized plan (in which the special pupils change classes on the same schedule as other pupils in the school) often can be developed. Although a departmentalized plan makes it impossible to utilize fully the unit of experience as a method of instruction, it has the advantage of making the special pupils feel more a part of the regular school program than does the block plan. Curriculum content may be offered under a variety of course names in such a departmentalized plan. For example, a course called "Science" may incorporate health, nutrition, sex education, and other basic learnings listed under **Social Competencies,** as well as something about electricity and the physical world. A course called "Citizenship Education" or "Civics" may incorporate other Social Competencies learnings. Basic learnings in other curriculum areas may be offered in courses called "Language Arts" or "English," and "Mathematics" or "Practical Mathematics." In addition there may be courses called "Occupational Education" or "Vocational Education," "Industrial Arts," "Home Arts" or "Home Economics," and "Health and Physical Education." In a departmentalized plan, minimum graduation requirements for retarded pupils should be set up on a unit basis which, upon being met by the pupils, lead to the granting of a diploma.

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[16] The services of Vocational Rehabilitation job placement counselors can be made available to educable mentally retarded pupils in high school special education classes through special programs planned for such pupils. Information about such special programs may be obtained from either the Vocational Rehabilitation Division or the Special Education Section of the North Carolina State Department of Public Instruction, Raleigh.

Suggested Outline for

CURRICULUM FOR THE EDU

The ultimate goal of the educational program is socialization: "the developm
the individual may become a social as

Public School

CA* = 6 to 18 or above; MINIMUM TWELVE-YE

The school curriculum should prepare the e. m. r. person for duties as prospective spous
give him vocational proficiency through the development of personal attributes and specif

LEVEL I (PRIMARY)	LEVEL II (ELEMENTARY)	LEVEL III (JUNIOR HIGH)
CA* = 6, 7, 8, (9) MA = 3 to 6 RL = 0 to 1	CA = 9, 10, 11, (12) MA = 4½ to 9 RL = 0 to 3	CA = 12, 13, 14, (15) MA = 6 to 11+ RL = 1 to 5
(Self-contained Class:) **BASIC LEARNINGS:** **Social Competencies** —in the school, home, and family; basic aspects of health and safety; introduction to cultural heritage and current events. **Communication Skills** —language development (listening and speaking skills); pre-reading (visual discrimination and memory) and pre-writing (visual-motor coordination) skills. **Number Concepts** —pre-arithmetic. **CORRELATED LEARNINGS:** **Art** **Music** **Physical Education**	**(Self-contained Class:)** **BASIC LEARNINGS:** **Social Competencies** —in the school, home, family, and community; health and safety; cultural heritage and current events. **Communication Skills** —listening and speaking; beginning reading, writing, and spelling. **Number Concepts** —beginning arithmetic and related learnings. **CORRELATED LEARNINGS:** **Art** **Music** **Physical Education** **Practical Science**	**Block or Modified Block Plan:** Special Teacher(s): **BASIC LEARNINGS:** **Social Competencies** —in the school, home, community, and state; health and safety; cultural heritage and current events; prevocational exploration and vocational competencies. **Communication Skills** —listening, speaking, reading, writing, and spelling. **Number Concepts** —practical arithmetic and related learnings. **PRACTICAL SCIENCE (correlated with the Basic Learnings)** Special or Regular Teacher(s): **HOMEMAKING SKILLS** **PREVOCATIONAL TRAINING** Regular Teachers: **Art** **Music** **Physical Education**
Teacher-Consultants: Art, Music, Physical Education	Teacher-Consultants: Art, Music, Physical Education	

This chart outlines suggested sequential levels of a minimum twelve-year special-class program for the educable mentally retarded. Modifications may be necessary, especially in small school systems with an insufficient number of eligible pupils to accommodate the program as outlined. The chronological age ranges will not always coincide exactly with those shown at each Level, and some overlapping might occur. Every effort should be made to insure that the age range at any one Level does not exceed four years, except possibly at Level IV. Current State Board of Education regulations governing public school classes for the educable mentally retarded should be consulted for class-size and IQ-range requirements. NOTE: The curriculum outline at each Level indicates curriculum content and organizational plan, not course names or daily schedule.

Developing a Sequential

ABLE MENTALLY RETARDED

of personality in relation to environment so that within the limits of his ability
instead of a social liability." . . . Davies

Post - School

R PROGRAM

parent, householder, and citizen, and should
skills necessary for success on the job.

LEVEL IV
(SENIOR HIGH)

CA = 15, 16, 17, 18+
MA = 7½ to 12+
RL = 2.5 to 6

Block or Departmentalized Plan:

Special Teacher(s):

BASIC LEARNINGS:

Social Competencies

—in economic and social environments; health and safety; cultural heritage and current events; vocational competencies

Communication Skills

—listening, speaking, reading, writing, and spelling (correlated with all curriculum areas and vocational activities).

Number Concepts

—practical arithmetic and related learnings (correlated with all curriculum areas and vocational activities).

PRACTICAL SCIENCE (correlated with the Basic Learnings)

Special or Regular Teacher(s):
HOMEMAKING SKILLS
VOCATIONAL TRAINING

Regular Teachers:

Art	**Band**
Driver Training	**Chorus**
Music	**Sports**
Physical Education	**Typing**

Special Teacher-Coordinator or Vocational Rehabilitation Job-Placement Counselor:
ON-THE-JOB TRAINING

GRADUATION

TO COMMUNITY

Work (Unskilled or Semi-skilled)

or

Homemaking

TO VOCATIONAL REHABILITATION**

Further Training

then

To Community

TO SHELTERED WORKSHOP

Further Training

or

Permanent Placement

*CA = approx. Chronological Age range (in years)

MA = approx. Mental Age range (in years)

RL = approx. Reading Level range (in school grades)

** Vocational Rehabilitation counseling and job placement services are also available to retarded pupils in high schools.

COORDINATION OF LEVELS

An evaluation of knowledge or skills should be made for each of those pupils who are entering a level and whose performance the teacher has not observed previously. Indeed, every pupil should be evaluated at the beginning of the school year. Any deficiencies should be corrected before higher level performance is attempted. The teacher, therefore, should be familiar with the curriculum at all Levels, not just at the Level at which he teaches. The curriculum as outlined at each Level will serve as a guide for determining the level of achievement necessary to attain readiness for the next Level. Some pupils may be ahead or behind the levels of achievement presented, and any one pupil may be more advanced in one area of the curriculum than in another. It is necessary to determine each pupil's level of achievement and begin instruction at that level.

BASIC LEARNINGS FOR THE E.M.R

A list of some of the basic things which educable mentally retarded children should be taught is given on the following pages. These basic learnings are grouped under three major headings: **Social Competencies, Communication Skills,** and **Number Concepts.** The list is divided into four "levels" corresponding to four sequential class levels.

No attempt has been made to list specific learnings in all of the traditional curriculum areas. For suggestions about what the curriculum should include in science, physical education, art, music, and other traditional curriculum areas, the reader is referred to the chapter of this guide entitled **The Traditional Curriculum Areas As They Relate To The E. M. R.**

Many of the items, or groups of items, in this list—and particularly those listed under **Social Competencies**—will suggest possible experience units which might be developed.

Note that the items in this list indicate some of the things which should be taught —but not **how** they should be taught. This must be kept in mind especially in teaching the concepts listed under **Communication Skills** and **Number Concepts.**

Although an attempt has been made to list the items under the subgroupings of these basic learnings in the sequential order in which they should be taught, the teacher should not attempt to teach simply by starting at the beginning of the list and progressing through it item by item. That is not the purpose of this list. Many of the items indicate things which should be taught concurrently; and many of them (such as the "Vocabulary" concepts listed at Level I under **Number Concepts)** should be taught over a long period of time, extending even into succeeding levels. There also should be a great deal of correlation of the various areas of the curriculum. For example, the "Vocabulary" concepts listed under **Number Concepts** (Level I) are just as much a part of a total language development program as are the concepts listed under **Communication Skills**; they are listed under **Number Concepts** because of their particular relevance to the development of readiness for number concepts. They need not necessarily be taught in a class "period" devoted to number concepts.

To indicate how the items in this list might be taught in the classroom, let us take an example from the "Vocabulary" to which we have just referred. Let us assume that the teacher wants to be certain that the pupils understand the concepts represented by the words "high" and "low." The teacher might want to begin by pointing out that "the ceiling is high, the floor is low," using several such concrete examples. The purpose is not that the pupils learn a definition of "high" and "low," but that they understand the concepts of "high" and "low." Instead of going on to "over" and "under" or some other concept, this might be the time for the teacher to take up the comparative forms of "high"

and "low," even though the comparative forms are given farther down the list: "The ceiling is higher than the floor." The teacher could encourage oral response and help promote language development by requiring answers to questions: "Which is higher, the floor or the ceiling?" The teacher then could give practice in listening to and following directions: "Hold the crayon higher than your head." Only one or two such concepts should be developed at a time to avoid confusing the pupils. The teacher will want to be certain that the pupils understand and use the concepts correctly in other activities. Later the teacher could become more abstract by using examples which the pupils might not be able to observe at the moment: "The sky is higher than the ground." After a number of concepts have been learned, they can be intermixed, perhaps while providing opportunities to develop other concepts such as remembering things in the correct sequence: "Hold the pencil higher than your head. Put the pencil inside the box. Then put the box under the chair."

Finally, but importantly, this list of basic learnings is offered as a guide, but it is not meant to be restrictive either of what is included or of when it is included. The individual teacher undoubtedly will want to add items to this list as additional basic needs of his pupils become apparent, and it may be necessary, at least for some pupils, to teach certain items at levels different from those under which they are listed.

Social Competencies

Develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(General)

- **to know and be able to tell his name, age, home address, telephone number, and birth date.**
- **to recognize his full name (printed).**
- **to know the names of his parents.**
- **to distinguish between his personal possessions and those of others.**
- **to develop self-care and habit training (personal cleanliness, neatness, care of personal property).**
- **to be aware of physical characteristics of self and others, such as likenesses and differences of height, weight, age, and apparel.**
- **to develop independent work habits.**

(School)

- **to know the teacher's name and duties.**
- **to know how he should act toward the teacher.**
- **to recognize and accept the authority of the teacher, principal, custodian, and other teachers.**
- **to know the name, location, and use of rooms and places in school (classroom, restroom, auditorium, lunchroom, playground, and so on).**
- **to know the names and duties of other school personnel and the way he should act toward them.**
- **to know the names of his classmates.**
- **to know and observe rules of classroom and school (including halls, restrooms, stairwells, lunchroom, playground, and school bus).**
- **to use good table manners.**
- **to know rules of courtesy, such as "please," "thank you," and "excuse me."**
- **to share, to take turns, and to cooperate.**
- **to share experiences, possessions, and ideas with others in the class.**
- **to accept his responsibilities in a group.**
- **to know the names of furnishings and equipment in the school.**

(Home, Family, and Neighborhood)

- **to know what a family is and who makes up his family.**
- **to know the duties of family members.**
- **to know the work of his parents (guardian).**
- **to know how family members act toward each other (children, parents).**

— to know the names, use, and furnishings of various rooms at home (living room, kitchen, bedroom, and so on).
— to know the locations of his home and school with respect to neighborhood and community.
— to know the location of park or playground and other recreational facilities, shopping center, grocery store, drug store, church, and post office.
— to respect the property of others in his neighborhood and community.
— to know how to get about the community safely.
— to be aware of community helpers and other service personnel, such as policeman, fireman, mailman (postman), garbage collector, bus driver, milkman.
— to know something about family service personnel and how they help us, such as doctor, dentist, nurse, clergyman (minister, preacher, pastor, priest), and druggist (pharmacist).
— to know proper behavior in public places.
— to know where to find public restrooms in the community.
— to know what to do when lost.

(Health)

— to keep hands, face, and body clean, and hair clean and neat.
— to brush teeth properly and regularly.
— to bathe regularly.
— to learn self-help routines (if not known), such as toileting, buttoning, tying shoelaces, and blowing nose.
— to use handkerchief when sneezing and coughing.
— to keep fingers and foreign objects out of mouth, eyes, ears, nose.
— to keep clothing neat.
— to change socks and underwear daily if possible.
— to wear clothes suitable to temperature and weather conditions, indoors and out.
— to eat properly (three meals daily, a variety of foods, chew food thoroughly).
— to know dangers of undereating, overeating, eating too many sweets, eating between meals.
— to know which foods are commonly eaten at the various meals.
— to help wash dishes properly (hot water, soap).
— to get eight hours sleep each night and to go to bed early.
— to maintain good posture, sitting and standing.
— to feel free to tell problems to the teacher.

(Safety)

— to be able to give his name when asked.
— to be careful in crossing streets.
— to know the dangers of playing in the street.
— to recognize and obey traffic lights and signs (such as stop signs and lights, flashing yellow lights, and railroad crossings).
— to go to and from school safely.
— to play safely on playground.
— to know what to do in a fire drill.
— to understand the dangers of playing around ponds and other bodies of water.

— **to understand that one must be careful with matches, knives, medicine, scissors, and other dangerous objects.**
— **to know what to do when an accident occurs (to report to person in charge).**

(Cultural Heritage and Current Events)

— **to know about important holidays (Halloween, Thanksgiving, Christmas, Valentine's Day, Easter, Mother's Day, Father's Day).**
— **to know something about historical persons (perhaps in connection with Columbus Day, Washington's Birthday, Lincoln's Birthday).**
— **to know what our nation's flag is and how to honor it.**
— **to know the name of the President.**
— **to be aware that there are current events reported on TV, radio, and in newspapers.**

Communication Skills

Develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(Language Development: Listening)

— **to listen to and identify various sounds, such as whistle, bell, drum, auto horn, truck, train, dog, bird, wind, and the like.**
— **to listen to sounds of different pitches (high, low) and intensities (loud, soft).**
— **to listen to music.**
— **to listen to stories and nursery rhymes.**
— **to listen to instructions.**
— **to answer simple questions.**
— **to repeat a sequence of sounds or words.**
— **to be able to tell or retell a simple story.**
— **to be able to tell a sequence of events in correct order.**
— **to follow a short sequence of instructions.**
— **to recognize and discriminate among spoken words having similar sounds.**
— **to identify the initial and final sounds of spoken words.**

(Language Development: Speaking)

— **to enlarge his oral vocabulary.**
— **to name objects.**
— **to tell about his experiences, possessions, and interests.**
— **to answer and ask questions.**
— **to pronounce words correctly and to enunciate clearly.**
— **to speak in sentences.**
— **to use common greetings and responses, such as "thank you," "you're welcome," "please," "hello," "come in," and "goodbye."**

(Pre-Reading: Visual Discrimination and Memory)

— **to recognize and name colors.**
— **to match like items.**
— **to notice similarities and differences among objects, pictures, and various shapes and sizes.**
— **to group objects according to similarities and differences.**
— **to put picture stories in the correct order.**
— **to remember where different objects are hidden and what they are.**
— **to remember or reproduce a simple drawing erased from the chalkboard.**
— **to develop left to right and top to bottom movements of the eyes.**
— **to understand spatial order (first, second, next, last, beginning, middle, end).**

(Pre-Writing: Visual-Motor Coordination)

— **to control large muscle movements.**
— **to begin to control small muscle movements.**
— **to develop eye-hand coordination and finger dexterity by hammering, stacking blocks, stringing beads, and engaging in similar motor activities.**
— **to assemble simple jigsaw puzzles.**
— **to hold and use crayons or large pencils.**
— **to color within lines.**
— **to trace lines and dots, and to stay within lines (as in mazes).**

Number Concepts

Develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(Vocabulary—extending into Level II)

— **to understand words denoting size relationships, such as small, large; little, big; short, tall; short, long; narrow, wide; thin, thick (fat).**
— **to understand words denoting amount, such as few, many; less, more; none, some, all; empty, full; light, heavy; slow, fast; much; enough.**
— **to understand words denoting position, such as low, high; below above; under, over; bottom, top; inside, outside; beneath (underneath), beside, between, around; first, last; beginning, end; middle; left, right; near, far; before, after; in front of, behind.**
— **to understand words denoting shapes of objects, such as circle, ball, square, box.**
— **to understand words denoting shape, such as round, square, curved, straight.**

— to understand words denoting condition, such as soft, hard; soft, loud; low, high (of sounds); young, old; cold, hot; cool, warm; freezing, boiling; cheap, expensive.
— to understand comparisons, such as small, smaller, smallest; large, larger, largest; smaller than, larger or greater than; etc.

(Numbers)

— to understand numbers before written number symbols are taught.
— to count objects.
— to group objects (by two's, three's, etc.).
— to understand adding to and taking away of objects.
— to count by rote as high as practical.
— to tell what number comes before or after a given number.
— to understand a fractional part of an object (one-half).
— to know what "first," "second," etc., mean.
— to begin to recognize number symbols.
— to begin to write (copy) number symbols.

(Money)

— to know that money is used to buy things.
— to know that people, including his parents, are paid money for work they do.
— to recognize coins (penny, nickel, dime).

(Time)

— to come to school on time.
— to have some understanding of morning, noon, afternoon; day, night; today, yesterday, tomorrow; breakfast, lunch, supper; day, week, weekend, month.
— to use the names of the days of the week and the months of the year.
— to understand some of the differences between summer, winter, spring, and fall.
— to know what a calendar is for.
— to know what a clock is for.
— to begin to tell time (by hour, half hour).
— to know when his birthday is and how old he is.

(Measurement)

— to recognize a quart, half pint, pint.
— to understand dozen; inch, foot, yard.
— to have some understanding of temperature and to begin to read the weather thermometer.

Social Competencies

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(General)

— **to be punctual.**
— **to know and practice good table manners.**
— **to use the phone properly.**
— **to know the importance of good grooming and good manners.**
— **to meet and greet friends and neighbors in an acceptable manner.**
— **to meet strangers with acceptable caution.**
— **to use the communication skills in social situations (conversation, letter writing, and so on).**
— **to develop good interpersonal relationships.**
— **to be a cooperative member of a group.**
— **to develop feelings of self-worth.**
— **to know the importance of completing tasks.**
— **to accept and profit from constructive criticism.**
— **to respect authority and the rules and laws of society.**

(School, Home, Family, and Community)

— **to know the names of his parents.**
— **to know school personnel by name.**
— **to know the importance of the family and the responsibility of the individual to the family.**
— **to know the location of his local community on State map.**
— **to know about some of the local industries, occupations, and business establishments, and the kinds of jobs people perform.**
— **to know about local communication and transportation facilities, including the airport.**
— **to know the location of park or playground and other recreational facilities, shopping center, grocery store, drug store, church, and post office.**
— **to know about local points of interest (museums, parks, monuments, and so on).**
— **to respect the property of others in his neighborhood and community.**
— **to help keep the community clean (not be a "litterbug").**
— **to know about community helpers and other service personnel, such as policeman, fireman, mailman (postman), garbage collector, bus driver, and milkman.**
— **to know about family service personnel and how they help us, such as doctor, dentist, nurse, clergyman (minister, preacher, pastor, priest), and druggist (pharmacist).**

(Health)

— to continue to improve self-care (cleanliness, attention to appearance).
— to brush teeth regularly and properly.
— to care for the hair.
— to wash hands before eating and after toileting.
— to bathe regularly.
— to wear clean clothes.
— to wear clothes suitable to temperature and weather conditions.
— to get sufficient rest.
— to eat proper foods and to know that certain foods are necessary every day for good health.
— to know the importance of cleanliness in preparing, serving, and storing food, and washing dishes and cooking utensils.
— to know that some foods need to be refrigerated.
— to have good table manners.
— to participate in outdoor activities.
— to begin to understand the possible bad effects of tobacco and alcohol.
— to know what to do when he doesn't feel well.
— to be aware that there are internal bodily organs (heart, lungs).
— to know the duties of a doctor, dentist, and nurse.
— to know the value of medical and dental examinations.
— to have wholesome mental attitudes.
— to accept criticism.
— to feel free to discuss problems with the teacher.

(Safety)

— to know the difference between caution and cowardice.
— to follow good safety rules in the school, the home, and the community.
— to know basic rules for fire prevention.
— to use electrical appliances safely.
— to ride a bicycle safely.
— to know and understand pedestrian traffic rules, signs, and signals.
— to recognize and know the meaning of signs of danger.
— to know the hazards of playing around railroad tracks, highways, bodies of water, and other places of potential danger.
— to know what to do in case of an accident (to report to proper authority).
— to know about community helpers in safety (policeman, fireman).

(Cultural Heritage and Current Events)

— to know about historical figures (Columbus, Washington, Lincoln, pioneers).
— to know some patriotic songs.
— to know about important public persons (President, governor, mayor).
— to know why we vote.
— to know the term "current events" and to be aware of them as reported on TV, radio, and in newspapers.

Communication Skills

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(Listening and Speaking)

— to use the listening and speaking skills begun at Level I.
— to improve his auditory discrimination and memory.
— to identify spoken words that begin with the same sound, that end with the same sound, that rhyme.
— to hear and identify the initial, final, and medial sounds in spoken words.
— to recognize the sound of consonant blends in spoken words.
— to listen to and follow instructions.
— to listen to stories, poems, and speakers.
— to answer and ask questions.
— to express thoughts orally and to share his experiences orally with others.
— to wait his turn to speak.
— to talk over the telephone.

(Reading)

— to improve his visual discrimination and memory.
— to match and sort pictures, letters, and words (on cards).
— to "read" words in association with pictures.
— to help develop experience chart stories.
— to understand that printed or written words represent spoken words.
— to "read" experience chart stories, pre-primers, and primers.
— to begin to recognize printed or written words in different contexts.
— to recognize individual parts of words.
— to identify individual letters in words.
— to begin to use phonetic analysis, context clues, and structural analysis in word attack.
— to be able to read "old" words in new contexts with understanding.
— to read independently for content and direction.
— to pay attention to pronunciation, phrasing, and intonation while reading orally.
— to pay attention to punctuation while reading.
— to read simple signs and labels.
— to know the alphabet.

(Writing)

— to improve his visual-motor coordination (see Level I).
— to begin to read manuscript before writing is begun.
— to copy manuscript letters, words, and simple sentences.
— to write in manuscript form.

(Spelling)

— **to read, write, and pronounce words correctly before learning to spell them.**
— **to understand the meaning and use of words before learning to spell them.**
— **to recognize independent parts of words.**
— **to learn to spell those words which he uses and needs to write, including his name and basic vocabulary words.**

Number Concepts

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(Vocabulary)

— **to understand and use the vocabulary words listed at Level I.**
— **to understand the standard arithmetic vocabulary, such as add, subtract, plus, minus, sum, total.**

(Numbers)

— **to count by rote as high as practical.**
— **to recognize number symbols (to 20, and higher if possible).**
— **to write (copy) number symbols (to 10, and higher if possible).**
— **to group objects in two's, five's, and ten's.**
— **to understand simple addition and subtraction of objects from one to ten.**
— **to understand fractional parts of objects.**
— **to count and write to 100 (by one's, ten's, five's, two's).**
— **to apply arithmetic principles in solving simple problems found in his environment (concrete objects and actual situations). These problems may include addition and subtraction of objects, measurements, and weights.**
— **to be able to solve simple addition and subtraction problems symbolically on paper.**
— **to achieve competence in the use of addition and subtraction concepts based on concrete measurement.**
— **to understand simple fractions (Some pupils).**
— **to know arithmetic signs and symbols (+, —, ×, ÷) and common abbreviations, such as lb., ft., in.**
— **to begin to learn simple multiplication and division (some pupils).**

(Money)

— **to name and know the value of coins and bills at least through $5.00.**
— **to make change at least to $1.00.**
— **to use "¢" and "$" correctly in written form.**

— to solve addition and subtraction problems involving money.
— to know what savings and allowances are.
— to know what a bank is.
— to understand words such as cheap, expensive, and bargain.

(Time)

— to use time terms correctly, such as hour, minute, second; o'clock; noon, midnight; clock, calendar; day, week, weekend, month, year; half-past, quarter past; a.m., p.m.
— to use clock and calendar correctly.

(Measurement)

— to use measurements in everyday experiences.
— to use ruler and yardstick in measuring.
— to use standard measures, such as inch, foot, yard; quart, half-pint, pint, gallon; cup, half-cup, quarter-cup; tablespoon, teaspoon; pound, ounce; dozen, half-dozen.
— to have some concept of direction (north, south, east, west).
— to know his height and weight.
— to read a weather thermometer.
— to have some concept of distance (block, mile).
— to identify a triangle, diamond, and cube.

Social Competencies

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(General)

— to use good grooming, appropriate dress, and good health practices.
— to know and use appropriate behavior and courtesies in social situations.
— to know how to make social introductions.
— to know how health practices (nutrition, cleanliness) contribute to personal appearance.
— to select and wear appropriate clothing.
— to maintain good posture.
— to accept and profit from constructive criticism.
— to be truthful, dependable, and tolerant.
— to participate in school activities.
— to select suitable entertainment activities.
— to know the basic steps in social dancing.
— to develop acceptable boy-girl relationships.
— to know acceptable dating procedures.
— to share responsibilities in group activities.
— to participate in group sports and other recreational activities.

(Home and Community)

— to know the components of good family life.
— to know the importance of proper care of infants.
— to know good housekeeping practices.
— to understand the value of sound budgeting practices.
— to understand what is meant by utilities (water, electricity, and so on).
— to know about repair services (electrician, plumber, telephone, furnace, TV).
— to know and practice acceptable behavior and etiquette in public places (restaurant, church, library, bus, theater, public streets, and so on).
— to know and respect the duties of community service personnel, such as policemen and firemen.
— to know about various services (telephone, telegraph, electricity, newspaper, milk delivery; fuel—oil, gas, coal, wood; transportation services—taxi, bus, rail, air; hospital and health services; emergency services—fire, rescue squad, police, ambulance).

(State)

— to know the geographical divisions of the State (Coastal Plain, Piedmont, Mountains).

— to know the major cities of the State.
— to know the major industries of the State (textiles, furniture, tobacco, and so on).
— to know something about State government (location, major officials and their duties, organization and structure, operation and function).

(Health)

— to practice good health habits learned at previous levels (rest, food, cleanliness, exercise).
— to practice good habits of dress and grooming.
— to recognize the need for body deodorant.
— to have some understanding of basic bodily functions.
— to understand and accept body changes.
— to develop acceptable sex attitudes.
— to know the harmful aspects of the use of drugs, tobacco, and alcohol.
— to know simple first aid procedures.
— to know elementary symptoms which indicate a need for medical attention.
— to know the services offered by a dentist, nurse, and optician.
— to know what constitutes a balanced meal.
— to prepare simple meals.
— to distinguish among different qualities of food.
— to develop good mental health.
— to have a realistic concept of his abilities and talents.

(Safety)

— to use general safety rules taught at previous levels.
— to read and understand warning signs and labels.
— to replace electrical fuses properly.
— to follow safe procedures during electrical storms.
— to know the value of maintenance (of furniture, appliances, furnaces, plumbing, wiring, vehicles, housing, and so on).
— to be aware of poisonous plants, animals, medicines, and household products.
— to use power mowers properly.
— to observe safety rules at railroad crossings, highways, and bodies of water.
— to swim, if possible, and to know water safety rules.
— to know about general health hazards and how to prevent them.
— to prevent accidents or accident-potential situations.
— to be able to phone for fire or police assistance.

(Cultural Heritage and Current Events)

— to know about national holidays and about important persons and events in our national history.
— to know about governmental organization and officials (local, State, national).
— to understand democratic procedure, including voting.
— to know about important current events.

(Prevocational Exploration)

— **to know about the various job areas: service occupations (such as dishwasher, kitchen helper, maid); agriculture, fishing, forestry; semi-skilled occupations (such as truck driver, factory worker); unskilled occupations (such as day laborer).**

(Vocational Competencies)

— **to use and care for simple tools and materials.**
— **to understand how hours and wages are related.**
— **to take pride in good workmanship.**
— **to follow directions.**
— **to practice rules of good safety.**

Communication Skills

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(Listening and Speaking)

— **to improve his listening and speaking skills.**
— **to enlarge his vocabulary.**
— **to use oral language acceptably in social situations.**
— **to speak before classmates with confidence.**
— **to be an attentive listener.**
— **to engage in social conversations and discussions.**
— **to use the telephone.**

(Reading)

— **to improve his reading skills.**
— **to read an increasing variety of materials, including newspapers, magazines, and comic books.**
— **to read and understand TV, radio, and movie listings.**
— **to use catalogs, telephone directories, dictionaries, and handbooks.**
— **to use the library, including reference materials.**
— **to use road maps.**
— **to understand postal terms, such as special delivery, money order, first class.**

(Writing)

— **to write legibly and accurately in manuscript form.**
— **to write some things cursively.**
— **to use adequate punctuation, capital letters, and common abbreviations, such as Mr., Ave., and N. C.**
— **to write friendly letters.**
— **to complete blank forms.**

(Spelling)

— to use the correct pronunciation of words.
— to understand the meaning and use of words he learns to spell.
— to recognize independent parts of words.
— to learn to spell essential words encountered in all curriculum areas and unit activities.

Number Concepts

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(Numbers)

— to be able to apply number skills to everyday problems drawn from his environment.
— to use the addition and subtraction skills previously learned.
— to multiply and divide.
— to use fractions up to and including eighths.

(Money)

— to use coins and bills of any denomination.
— to count and make change.
— to compute sales tax.
— to know how to read advertisements perceptively.
— to compare values and prices when shopping.
— to recognize real versus apparent bargains.
— to know the advantages and disadvantages of quantity buying.
— to budget available money.
— to understand installment buying.
— to understand the importance of saving.
— to be aware of the services banks render, such as checking accounts, savings accounts, and loans.
— to understand percent.
— to understand what "interest" means.

(Time)

— to read roman numerals on clock and watch faces.
— to read timetables and schedules.

(Measurement)

— to understand and use all ordinary units of measure, such as inch, foot, yard, mile; pint, quart gallon, bushel; teaspoon, tablespoon, cup, etc.; ounce, pound, ton; plus the usual abbreviation for any of these units of measure.
— to use all ordinary measuring devices, such as ruler, yardstick; weighing scale; thermometer, and oven temperature gauge.

Social Competencies

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(General)

- **to increase his familiarity with his immediate physical, social, economic, cultural, and political environments.**
- **to make the transition to post-school living and to his future adult role as family member, wage earner, and community participant.**
- **to accept and profit from constructive criticism.**
- **to adapt to new situations.**
- **to accept responsibilities.**
- **to have a realistic concept of his abilities and limitations.**
- **to feel secure in his knowledge of basic social skills.**
- **to be able to choose friends wisely and to keep them.**
- **to show courtesy and respect to fellow workers and to those in authority, and to maintain good relations with them.**
- **to dress appropriately and attractively for various activities and occasions.**
- **to have a wholesome attitude toward the opposite sex.**
- **to understand and accept the moral standards of society.**
- **to understand the importance of keeping clothing, automobile, and the home and its surroundings properly maintained.**
- **to know the importance and nature of proper infant care.**
- **to know how to obtain various services (telephone, telegraph, electricity, newspaper, milk delivery; fuel—oil, gas, coal, wood; transportation services—taxi, bus, rail, air; hospital and health services; emergency services—fire, rescue squad, police, ambulance).**
- **to know when and how to obtain repair services (electrician, plumber, telephone, furnace, TV, and so on).**
- **to know where to find the principal buildings and activities in the community.**
- **to exercise proper care of public property.**
- **to read maps, directions, and instructions with understanding.**
- **to register for the draft.**

(Economic Environment)

- **to know what the job opportunities are in the community.**
- **to understand income, budgeting, installment buying, savings, payroll deduction, and taxes, as they will pertain to him.**
- **to know how to shop wisely.**
- **to know the importance of maintaining a good credit rating.**

(Social Environment)

- **to understand the proper relationship of the individual to other members of society.**

— to know what membership in church, club, and union entails.
— to know the function of service agencies, such as Employment Security Commission, public welfare, Family Service, and Traveler's Aid.

(Health)

— to continue to develop and use personal physical and mental health habits.
— to know the importance of a well-regulated life: diet, work, recreation, rest.
— to recognize the importance of physical fitness and exercise.
— to have self-discipline in maintaining a healthful routine in eating, bathing, resting, and recreation.
— to dress in proper clothing for various occasions.
— to understand good sanitation practices.
— to prepare a simple, well-balanced, nutritious, and appetizing meal.
— to know the possible health hazards associated with the use of drugs, alcohol, and tobacco.
— to recognize elementary symptoms of illness.
— to recognize the importance of regular dental check-ups and medical examinations.
— to help nurse ill persons properly.
— to know of medical services available in the community.
— to know the importance of a pre-natal program.
— to know basic elements of child care.
— to recognize when a child needs medical attention.

(Safety)

— to know and use all the basic rules for safety.
— to know and use safe practices at home.
— to observe safety rules on the job.
— to know what to do in case of emergency and to give emergency first aid.
— to know and follow rules and regulations for safe driving and highway safety.
— to maintain vehicles, appliances, tools, machinery, and home in good repair.
— to understand hazards to which babies and children are exposed.
— to care properly for infants and children.
— to know fire laws.
— to understand need for insurance against accidents, illnesses, and natural disasters.
— to read and understand warning signs and labels.
— to swim and to give artificial respiration.

(Cultural Heritage and Current Events)

— to know about important historical persons and events.
— to know about and discuss important current events.
— to know the duties performed by public officials.

- **— to understand the basic purposes and functions of local, state, and federal government, and the method of selecting public officials through elections.**
- **— to understand the rights and responsibilities of citizens, including voting.**
- **— to have some understanding of the two-party system.**

(Vocational Competencies)

- **— to be able to profit from active job exploration.**
- **— to be able to meet the skill, experience, educational, and personal requirements of his job.**
- **— to know the kinds of jobs available in the community.**
- **— to know how to apply for a job and to know the information and forms required.**
- **— to know how the Vocational Rehabilitation agency and employment agencies can help him in finding a job.**
- **— to know how newspaper want ads can help him in finding a job.**
- **— to be aware of fringe benefits (hospitalization, insurance, vacations, and so on).**
- **— to be aware that successful performance on the job is related to the conduct of his life after working hours (rest, recreation, maintenance of good health, good management of home and finances).**
- **— to "meet the public" as may be required on the job.**
- **— to take and relay telephone messages.**

Communication Skills

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

(General)

- **— to use communication skills in correlation with all curriculum areas.**

(Listening and Speaking)

- **— to use all language skills previously developed.**
- **— to speak before others with ease and confidence.**
- **— to be an attentive and critical listener.**
- **— to engage in social conversations and discussions.**
- **— to make social introductions.**
- **— to be able to give directions.**

(Reading)

- **— to attain maximum reading proficiency and to use it in all curriculum areas.**
- **— to read and use cookbooks, driver training manuals, newspapers, magazines, directories, and catalogs.**
- **— to read and follow instructions, including those on food packages.**

— to be able to use reference materials.
— to use the library (school and community).

(Writing)

— to write legibly and accurately (cursive and/or manuscript).
— to use writing skills satisfactorily in all curriculum areas.
— to complete blank forms, such as application forms.
— to write letters (personal and business) and thank you notes.
— to write checks.
— to order by mail.

(Spelling)

— to spell essential words in all curriculum areas, including occupational words and words needed in filling out application and other forms.

Number Concepts

Continuing from the previous Level, develop the curriculum to include activities, experiences, and discussions which will teach the EMR pupil—

— to use all fundamental arithmetic skills by applying them to problems found in his environment.
— to use all ordinary units of measure (linear, liquid, dry, and temporal).
— to use all ordinary measuring devices.
— to know the skills associated with the use of money (listed at Level III).
— to know the importance of budgeting and saving.
— to know how to open and maintain checking and savings accounts.
— to know the advantages of paying cash for purchases.
— to understand the principle of installment buying.
— to understand simple interest.
— to know where and how money may be borrowed (at various interest rates).
— to know what is involved in buying and financing a car;—a home.
— to know how to apply for license tags and auto titles.
— to have some understanding of Federal, state, and local taxes of various kinds, such as income, property, and sales taxes.
— to understand the purposes of paycheck deductions, such as withholding taxes and social security.
— to know the value of keeping certain records, such as tax and health records.
— to know about various kinds of insurance, such as life, health, accident, hospital, property, and auto.

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APPENDICES

FIELD TRIPS

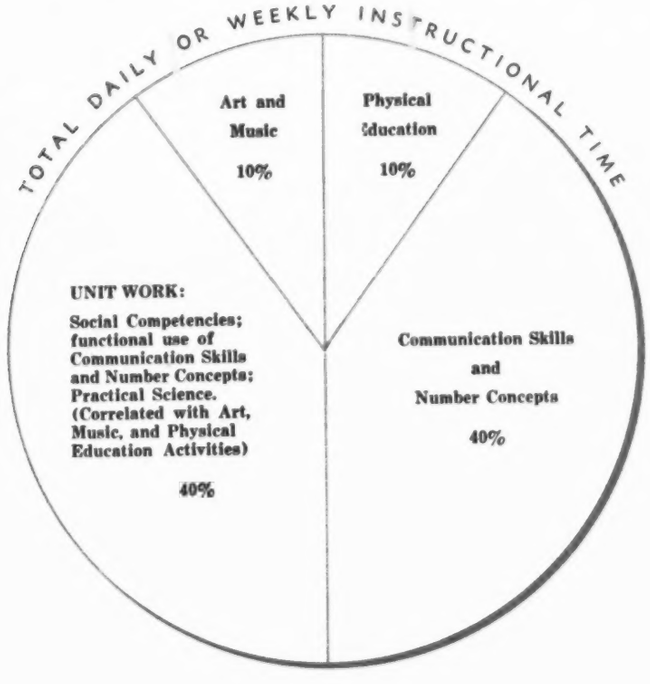
Field trips can be an effective part of the curriculum. To be of most value, they should be integrated with classroom activities. Pupils should be prepared for the trips with useful background information so that they will know where they are going, what to look for, and how to behave while there. After a trip a follow-up review should be made. Thank-you notes should be written to appropriate persons. Some of the possible places to visit include: fire station, post office, local governmental offices, police station, bank, transportation terminals, museums, historic sites, dairy, bakery, and florist's greenhouse or nursery. Field trips will have different purposes at different grade levels. At the upper levels, particularly, they will aid in prevocational and vocational orientation. Arrangements for trips should be made ahead of time and in accordance with local school policies governing them.

DAILY CLASSROOM SCHEDULE

The schedule wheel reproduced below suggests approximate total percentages of daily or weekly instructional time which should be devoted to the various curriculum areas in self-contained special classes for the educable mentally retarded. It may be necessary to alter the percentages of time in classes organized on block or departmentalized plans in junior or senior high schools.

The teacher should plan a daily classroom schedule in which the time of day and the duration of the various activities is compatible with the attention spans and other learning characteristics of the children as well as with the total school schedule (time of lunch period and playground period). Some curriculum activities, such as specific instruction by the music teacher-consultant and a library period, will not occur every day.

The most important thing about the schedule of classroom activities is that there should be a great deal of correlation of the various curriculum areas. For example, art and music activities should be a part of unit activities just as are communication skills and number concepts, and physical education should be correlated with instruction in general health and other social competencies.


TOTAL DAILY OR WEEKLY INSTRUCTIONAL TIME
Art and Music 10%
Physical Education 10%
UNIT WORK: Social Competencies; functional use of Communication Skills and Number Concepts; Practical Science. (Correlated with Art, Music, and Physical Education Activities) 40%
Communication Skills and Number Concepts 40%

GRADING

The academic progress of the retarded child in the special class should be measured in terms of his own capabilities and not in terms of those of children with higher potentials. The fact that the retarded child is placed in a special class constitutes a recognition of his inability to compete academically with children of average and above-average academic ability. If the parents understand and accept this fact and if the school records show that the child is placed in a special class, it should not be necessary to grade retarded children against a standard which has little meaning or value when applied to them.

REPORTING TO PARENTS

Several methods have been used in reporting pupil progress to parents of mentally retarded children. These methods include the regular report card with modified grading system, special report card, narrative-type notes to parents, teacher-parent conferences, and various combinations of these methods. The regular report card with modified grading system is the method perhaps most widely used by special class teachers in North Carolina at the present time.

Any report to parents presumes parental interest in the progress of the child. Where such interest is lacking, a report to the parents becomes a mere formality. Sometimes several reporting methods are tried before settling upon one mutually acceptable to the parents and to the school. If possible, the reporting method to be used should be explained to the parents when the child is first placed in the special class. Each administrative unit, school, or class should use the reporting method which works best for it. In rare instances it may be necessary to use more than one reporting method within a single class.

TABLE FOR USE IN FINDING APPROXIMATE MENTAL AGE (IN YEARS AND MONTHS)

When Intelligence Quotient and Chronological Age Are Known

(Formula: $M.A. = \frac{I.Q. \times C.A.}{100}$)

	Chronological Age in Years/Months																			
I.Q.	**6/0**	**6/6**	**7/0**	**7/6**	**8/0**	**8/6**	**9/0**	**9/6**	**10/0**	**10/6**	**11/0**	**11/6**	**12/0**	**12/6**	**13/0**	**13/6**	**14/0**	**14/6**	**15/0**	**15/6**	**16/0**
50					4/0	4/3	4/6	4/9	5/0	5/3	5/6	5/9	6/0	6/3	6/6	6/9	7/0	7/3	7/6	7/9	8/0
51					4/1	4/4	4/7	4/10	5/1	5/4	5/7	5/10	6/1	6/4	6/8	6/11	7/2	7/5	7/8	7/11	8/2
52					4/2	4/5	4/8	4/11	5/2	5/6	5/9	6/0	6/3	6/6	6/9	7/0	7/3	7/6	7/10	8/1	8/4
53	MENTAL AGE			4/0	4/3	4/6	4/9	5/0	5/4	5/7	5/10	6/1	6/4	6/7	6/11	7/2	7/5	7/8	7/11	8/3	8/6
54				4/1	4/4	4/7	4/10	5/2	5/5	5/8	5/11	6/3	6/6	6/9	7/0	7/3	7/7	7/10	8/1	8/4	8/8
55	LESS			4/1	4/5	4/8	4/11	5/3	5/6	5/9	6/1	6/4	6/7	6/11	7/2	7/5	7/8	8/0	8/3	8/6	8/10
56				4/2	4/6	4/9	5/0	5/4	5/7	5/11	6/2	6/5	6/9	7/0	7/3	7/7	7/10	8/1	8/5	8/8	9/0
57	THAN		4/0	4/3	4/7	4/10	5/2	5/5	5/8	6/0	6/3	6/7	6/10	7/2	7/5	7/8	8/0	8/3	8/7	8/10	9/1
58			4/1	4/4	4/8	4/11	5/3	5/6	5/10	6/1	6/5	6/8	7/0	7/3	7/7	7/10	8/1	8/5	8/8	9/0	9/3
59	4/0		4/2	4/5	4/9	5/0	5/4	5/7	5/11	6/2	6/6	6/9	7/1	7/4	7/8	8/0	8/3	8/7	8/10	9/2	9/5
60			4/2	4/6	4/9	5/1	5/5	5/8	6/0	6/4	6/7	6/11	7/2	7/6	7/10	8/1	8/5	8/8	9/0	9/4	9/7
61		4/0	4/3	4/7	4/10	5/2	5/6	5/9	6/1	6/5	6/8	7/0	7/4	7/7	7/11	8/3	8/6	8/10	9/2	9/6	9/9
62		4/0	4/4	4/8	4/11	5/3	5/7	5/11	6/2	6/6	6/10	7/1	7/5	7/9	8/1	8/4	8/8	9/0	9/4	9/7	9/11
63		4/1	4/5	4/9	5/0	5/4	5/8	6/0	6/4	6/7	6/11	7/3	7/7	7/10	8/2	8/6	8/10	9/2	9/5	9/9	10/1
64		4/2	4/6	4/10	5/1	5/5	5/9	6/1	6/5	6/9	7/0	7/4	7/8	8/0	8/4	8/8	8/11	9/3	9/7	9/11	10/3
65		4/3	4/7	4/10	5/2	5/6	5/10	6/2	6/6	6/10	7/2	7/6	7/10	8/1	8/5	8/9	9/1	9/5	9/9	10/1	10/5
66	4/0	4/3	4/7	4/11	5/3	5/7	5/11	6/3	6/7	6/11	7/3	7/7	7/11	8/3	8/7	8/11	9/3	9/7	9/11	10/3	10/7
67	4/0	4/4	4/8	5/0	5/4	5/8	6/0	6/4	6/8	7/0	7/4	7/8	8/0	8/4	8/9	9/1	9/5	9/9	10/1	10/5	10/9
68	4/1	4/5	4/9	5/1	5/5	5/9	6/1	6/5	6/10	7/2	7/6	7/10	8/2	8/6	8/10	9/2	9/6	9/10	10/2	10/6	10/11
69	4/2	4/6	4/10	5/2	5/6	5/10	6/2	6/7	6/11	7/3	7/7	7/11	8/3	8/7	9/0	9/4	9/8	10/0	10/4	10/8	11/1
70	4/2	4/6	4/11	5/3	5/7	5/11	6/3	6/8	7/0	7/4	7/8	8/1	8/5	8/9	9/1	9/6	9/10	10/2	10/6	10/10	11/3
71	4/3	4/7	5/0	5/4	5/8	6/0	6/5	6/9	7/1	7/5	7/10	8/2	8/6	8/10	9/3	9/7	9/11	10/4	10/8	11/0	11/4
72	4/4	4/8	5/0	5/5	5/9	6/1	6/6	6/10	7/2	7/7	7/11	8/3	8/8	9/0	9/4	9/9	10/1	10/5	10/10	11/2	11/6
73	4/4	4/9	5/1	5/6	5/10	6/2	6/7	6/11	7/4	7/8	8/0	8/5	8/9	9/1	9/6	9/10	10/3	10/7	10/11	11/4	11/8
74	4/5	4/10	5/2	5/6	5/11	6/3	6/8	7/0	7/5	7/9	8/2	8/6	8/10	9/3	9/7	10/0	10/4	10/9	11/1	11/6	11/10
75	4/6	4/10	5/3	5/7	6/0	6/4	6/9	7/1	7/6	7/10	8/3	8/7	9/0	9/4	9/9	10/1	10/6	10/10	11/3	11/7	12/0